The Universal Waste Rule for Batteries WAC[1] 173-303-573(2)

Any business that generates dangerous waste must follow the dangerous waste rules, Chapter 173-303 WAC. The Universal Waste (UW) regulations allow less burdensome management of batteries, lamps, and mercury-containing equipment.

Q: Can I manage batteries at my business as UW?

A: All dangerous waste batteries can be managed as UW. Testing each battery is not necessary; the generator can assume a battery is a dangerous waste and manage it as UW. If a generator has test results that show a particular brand and size of battery is not a dangerous waste, it does not have to be managed as UW.

Examples of battery types that can be managed as UW include:

- Alkaline
- Mercuric-oxide
- Alkaline-manganese
- Zinc carbon
- Zinc air
- Silver oxide
- Lithium
- Nickel-cadmium (Ni-Cd)

Spent lead-acid batteries (typically automotive batteries) can be managed as UW. However they are most often managed under the optional lead-acid battery exemption (WAC 173-303-520).

Miniature button cell batteries are used in numerous products that require compact sources of electrical power, including toys, hearing aids, watches, calculators, and other portable devices. Some zinc air, alkaline manganese, and silver oxide button cell batteries may contain small amounts of mercury. Use of mercury in many button cell batteries has been eliminated due to state bans or manufacturers' voluntary elimination. Currently, mercury is no longer used in making alkaline batteries.

Consumer products with difficult-to-remove batteries can also be managed as UW.

[1] Washington Administrative Code

WHY IT MATTERS

Any business that generates dangerous waste must follow the dangerous waste rules, Chapter 173-303 WAC. In Washington State the Universal Waste Rule allows less burdensome management of:

- Batteries (#98.407a)
- Mercury-containing equipment (#98-407b)
- Lamps (#98-407c)

Businesses have the choice of managing these wastes as universal waste (UW) or dangerous waste. UW requirements for storage, collection, and transportation are less stringent.

MORE INFORMATION

Ecology's Universal Waste Web page: http://www.ecy.wa.gov/programs/hwtr/dangermat/universal_waste.html

If you have questions, contact your local Ecology regional office and ask for a Dangerous Waste Specialist:

Central	509-575-2490
Eastern	509-329-3400
Northwest	425-649-7000
Southwest	360-407-6300

SPECIAL ACCOMMODATIONS

If you need this document in a format for the visually impaired, call the Hazardous Waste and Toxics Reduction Program at 360-407-6700. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

Q: How do I manage UW batteries?

A: Labeling and marking:

Clearly label or mark individual batteries or containers of UW batteries with one of the following phrases:

- *Universal Waste – Batteries*
- *Waste Batteries*
- *Used Batteries*

Accumulation and dating of UW batteries:

You can accumulate batteries for one year from the date they are generated. To document this, the collection container or individual UW battery is typically marked with the first date of accumulation. You can also use any other method which demonstrates the accumulation time, such as keeping a log that identifies the first date of accumulation. An extension of the one year accumulation limit is allowed if the facility needs more time to collect enough items to facilitate proper recovery, treatment, or disposal.

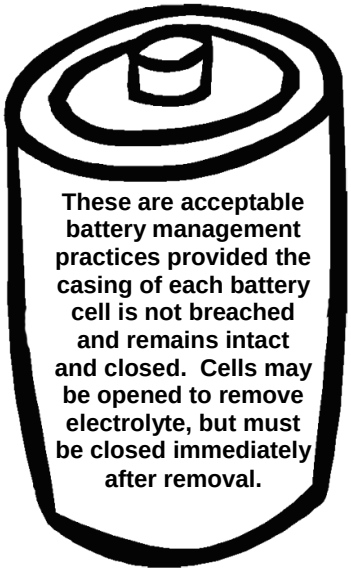
Prevent releases to the environment:

Store damaged or leaking batteries in closed containers to help prevent the release of toxic materials to the environment. Batteries must be compatible with one another and with the container.

Handlers[2] may not dilute, dispose, or treat UWs:

The following routine battery management activities are not considered treatment:

- Sorting batteries by type.
- Discharging batteries.
- Regenerating used batteries.
- Disassembling battery packs.
- Removing batteries from discarded consumer products.
- Removing electrolyte.



These are acceptable battery management practices provided the casing of each battery cell is not breached and remains intact and closed. Cells may be opened to remove electrolyte, but must be closed immediately after removal.

Large quantity handlers of UW (LQHUW):

When a handler exceeds 11,000 pounds of UW (or 2,200 pounds for lamps), they become an LQHUW and are subject to extra requirements, including:

- Obtaining a RCRA[3] Site Identification Number.
- Notification to Ecology of LQHUW status, and which specific types of UW they manage.
- Tracking type and quantity of UWs received and shipped.

[2] Handlers are either the original generators of the UW or businesses that receive and consolidate UW from other handlers before shipping to another handler or to a destination facility.

[3] Resource Conservation and Recovery Act

Transporting UW batteries:
You may self-transport UW batteries, complying with applicable U.S. Department of Transportation regulations. Refer to Ecology publication number 98-407 *The Universal Waste Rule* for details.

A dangerous waste generator has the choice of managing batteries as UW or under the more stringent dangerous waste requirements. In most cases UW management is much easier and the preferable alternative to dangerous waste management. Note that businesses that generate and manage dangerous wastes and UWs are considered both a dangerous waste generator and a UW handler. Regardless if you are a generator or a handler, you are liable for ensuring your waste is properly managed once it leaves your site.

Q: Where do I send UW batteries?

A: UW batteries may be sent to either another handler (acting as a collection point) or to a destination facility. Another handler could include any business that is already managing UW, government-sponsored collections, or hazardous waste management firms. Businesses that recycle or dispose of UW are called destination facilities. Ultimately, all UW must go to a destination facility. These facilities are subject to dangerous waste regulations for recyclers and hazardous waste disposal facilities. A facility that only accumulates UW would not be a destination facility.

For a list of firms that offer waste management services, visit www.ecy.wa.gov/apps/hwtr/hwsd/default.htm.

Q: Why are batteries hazardous?

A: Mercury, lead, cadmium, and other heavy metals can leak from batteries and pose environmental risks when released to the environment through improper disposal practices. Because these metals are toxic to humans and wildlife, it is very important to manage batteries appropriately. Mercury is especially toxic because it is persistent in the environment and increases in concentration as it goes up the food chain.

Another concern with waste batteries is their potential to cause fires. Stored batteries can short circuit, generate heat, and start a fire. Also, some battery types may not be compatible and could react when stored together.

Not all batteries are recycled in the same way, so generators are encouraged to segregate their batteries by type. For instance, nickel cadmium batteries can be recycled to recover their metal content. A recycler may not accept them if they are mixed with alkaline or other batteries.

Q: How do I manage household batteries?

A: Homeowners are not required to manage their batteries as UW, but are strongly encouraged to take them to a household hazardous waste collection facility if available. Another option for rechargeable batteries is to return them to the place of purchase if the retail store participates in a battery return program. Many retailers participate in a take-back recycling program operated by the non-profit Call2Recycle organization. To find a local participating store, go to the Call2Recycle Web site.